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A note on the identity of *Spirostreptus acutus* Karsch (Spirostreptida: Odontopygidae)

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ABSTRACT

Examination of the male holotype of *Spirostreptus (Odontopyge) acutus* Karsch, 1881, a species never placed in a modern genus since its description, shows it to be referable to *Kompsoprium*, of the Congo-Angola region. Uncertainty about the type locality induced previous mislocation in Mozambique; it is actually in central-western Angola.

NARRATIVE

Most of the diplopods named prior to 1884 were described by scientists who were basically general entomologists, and represented new millipeds in terms of external body form just as they did for insects, rarely illustrating or describing the male genitalia. Although F. Karsch, who named many new millipeds between 1879 and 1888, did provide sketches of these appendages for a substantial number of his new polydesmids and sphaerotheriids, he left behind an enduring legacy of doubt and confusion in the form of an unillustrated compendium of new "juliform" millipeds published in 1881. During a century of subsequent attention to Karsch's species, many of these enigmas in the three spirostreptoid families have been redescribed and placed to genus by Attems (1914), Demange (1967), and the present author (1996). Despite the efforts of these workers, a considerable number of Karschian names have remained uncertain (particularly those based upon female type specimens), and it is always useful to reduce this residue whenever possible.

During visits to the Berlin collection, I had several opportunities to study some Karsch types not previously documented, and take this occasion to put one of them

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on record, both to consign it in the right "modern" genus, and to correct a published misinterpretation about its type locality.

TAXONOMY

Kompsoprium

Kompsoprium Attems, 1935, Rev. Zool. Bot. Afr., 26: 340, as subgenus of *Haplothysanus*. Proposed for nine species, two of them new. Type species: *Haplothysanus (Kompsoprium) ligulatus* Attems, 1935, by original designation.

Thysanethus Chamberlin, 1951, Publ. Cult. Companh. Diam. Angola, 10: 91. Proposed for three species, two of them new. Type species: *Thysanethus scabrifer* Chamberlin, 1951, by original designation. Synonymized by Kraus, 1958.

Kompsoprium: Kraus, 1960, Ann. Mus. Roy. Afr. Centr., ser. zool., 82: 41. First use at the level of genus; key to and citations for 12 species.

DISCUSSION: *Kompsoprium* was proposed as a subgenus of *Haplothysanus*, to accomodate nine species in which the gonotelopodite was provided with a "Seitenast, Dorn, oder Lappen vor dem Ende." The designated type species was *H. (K.) ligulatus,* described as new by Attems in the same paper. A problem was introduced, however, by the fact that the type species of *Haplothysanus* itself (*H. polybothrus* Attems, 1909, from Kilimandjaro) also possessed just such a subterminal lappet. As noted by Kraus (1960: 30), who discovered this contradiction, any generic group based on presence of the subterminal process would have to be called *Haplothysanus.* However, as largely reconstituted by Professor Kraus, that genus was reduced to only six species some of which were unknown to Attems. In his monograph (1960: 41) *Kompsoprium,* with *Thysanethus* (Chamberlin, 1951) considered a synonym, embraced 12 species endemic to the then-Belgian Congo and northern Angola. In his key to genera, Kraus defined *Kompsoprium* by a suite of four characters, which collectively were opposed to ten genera with the ". . .Kombination der Merkmale abweichend."

It is obvious that a resolution of this situation requires an evaluation of both genera and several others possibly related to them, and especially, a critical restudy of *Haplothysanus polybothrus* – is this isolated East African species really congeneric with those in the Congo region? Is *Kompsoprium* possibly a polyphyletic assemblage? So many odontopygid genera have been defined on single "present-absent" character states, revision of the entire family may be a prerequisite to the achievement of satisfactory conclusions. For the present, I can only suggest allocation of *acutus* to *Kompsoprium* in its present, Krausian, sense.

NAME: Presumably derived from the Greek elements "*kompsos*" (elegant) and "*prion*" (a saw or similar serrated tool), the latter modified into the Latinized form "*prium*". The relevance of this name is not clear to me.

SPECIES: Thirteen.

RANGE: Northern Angola, southern and eastern sections of Zaire.

Kompsoprium acutum (Karsch), new combination
Figures 1-2

Spirostreptus (Odontopyge) acutus Karsch, 1881, Zeitschr. ges. Naturw., 54: 22.
Male holotype (ZMB 809) from "Pungo", without further indication (Homeyer *legit*).

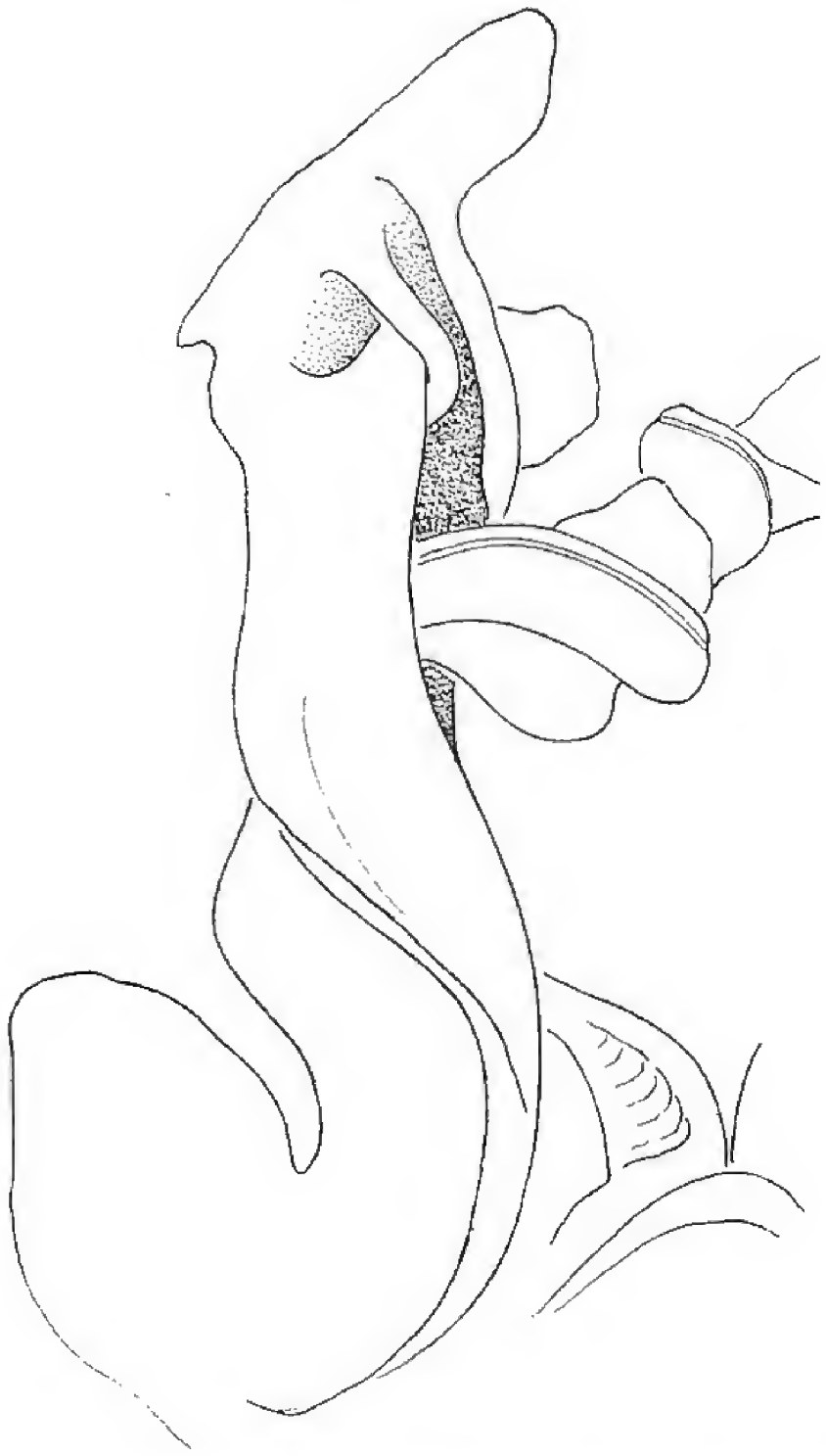

Fig. 1. *Kompsoprium acutum* (Karsch). Left anterior gonopod of holotype, anterior aspect.

REMARKS: The time available for examination of spirostreptoids during my work at the Berlin museum did not allow for as many illustrations as might be desired, still the drawings prepared from the type of *acutus* are adequate for a generic placement. Two points may be emphasized for the attention of others interested in this family: one that the coxal elements demonstrate a distinct torsion near midlength, producing an oblique groove as shown in Figure 1. Whether this is only an abnormality can be controlled by examination of other congeneric species; it is a condition not observed by me in any other - chiefly East African - genera. Secondly, the subterminal process of the solenomere (shaded in Figure 2) is notably small, but on the actual specimen did not appear to be broken or otherwise abnormal; its presence is of course a justification for placing this species into *Kompsoprium*.

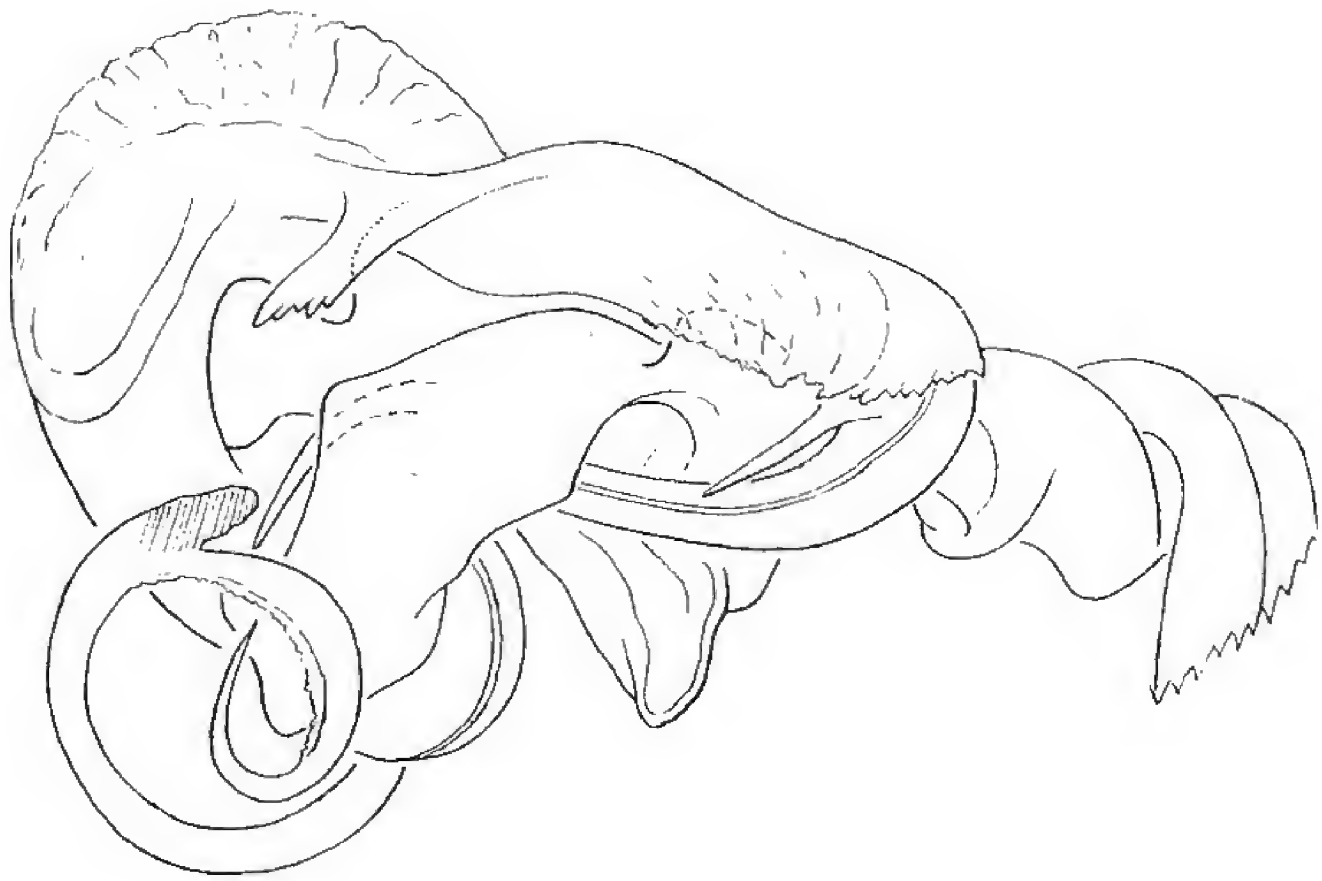

Fig. 2. *Kompsoprium acutum* (Karsch), telopodite of left gonopod of holotype, posterior aspect.

The location of "Pungo" has added an element of uncertainty to an already problematical situation. Schubart (1966: 153) considered the name to represent the modern spellings "Pungwe" or "Pungue", a river in Mozambique. Identification of the species as a form of *Kompsoprium* did not support this out-of-range placement. However, Karsch's contemporary at the Berlin museum, W. C. H. Peters, described many new reptiles from Africa, received from travelers who collected myriapods as well as snakes. One of his papers (1877) proposed the new species *Ablades*

homeyeri, the patronym honoring a Major von Homeyer, who found the type specimen at "Pungo Andongo", a place that still exists at 9.40S, 15.35E, Malanje Province, Angola. There can be no doubt that this is the true type locality for *acutum*.

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